

Date: Sat, 30 Jul 94 04:30:26 PDT  
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>  
Errors-To: Ham-Digital-Errors@UCSD.Edu  
Reply-To: Ham-Digital@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Digital Digest V94 #255  
To: Ham-Digital

Ham-Digital Digest                      Sat, 30 Jul 94                      Volume 94 : Issue    255

Today's Topics:

                    9600 baud & MICOR HELP?  
            ??using MAC with KPC-3 and Hostmaster program??  
                    cheap packet?  
                    Emerg. Comm. Message Center  
                    EZPACKET (2 msgs)  
                    Internet<>Packet (2 msgs)  
                    NYC Ham Freqs  
            Time division multiplexing on high speed modems. (2 msgs)

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>  
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Tue, 26 Jul 1994 06:56:56 +0000  
From: pipex!demon!gw6hva.demon.co.uk!martin@uunet.uu.net  
Subject: 9600 baud & MICOR HELP?  
To: ham-digital@ucsd.edu

In article <30q8lf\$hu3@search01.news.aol.com>  
    nealb35819@aol.com "NealB35819" writes:

> It is my understanding that the Micor takes about 4 Volts to activiate the  
> VCO to 5khz deviation....The problem we have is the G3RUH modem output is  
> about 80 mV....Have we openeed a can of worms ? We need help in  
> interfacing the Micor with the G3RUH modem...Can anyone out there help us  
> ???The network is for a 440 backbone going from CentralWyoming to  
> Montana....any help would be appreciated....tnx KE7VS

Hmmm, something wrong there - the G3RUH modem has normally around 8v of drive level on it's output - check the op-amp and maybe change it for another type and make sure you're 12v rail is intact.

Cheers, Martin.

--

Martin Vernon, Supavision  
Sysop GB70S & GB70SP  
BBSnet: GW6HVA@GB70SP  
AMPRnet: gw6hva@gb7osp.ampr.org  
Internet: martin@gw6hva.demon.co.uk

-----  
Date: Fri, 29 Jul 1994 18:10:19 GMT  
From: ihnp4.ucsd.edu!agate!library.ucla.edu!news.ucdavis.edu!chip.ucdavis.edu!  
szhall@network.ucsd.edu  
Subject: ??using MAC with KPC-3 and Hostmaster program??  
To: ham-digital@ucsd.edu

Thank you for reading this..I have a Mac Classic and a Mac Apple and I am considering using it with my KPC-3 with a Hostmaster program for packet. Right now I am using a PC with the KPC-3 for packet and it works very well..Would this set up with the Mac work better?? Would it be fast or slower then the PC?. Does the MAC to TNC cable special?? Thanks for reading this..Hope you can help..Jeff

-----  
Date: Fri, 29 Jul 1994 08:53:05 GMT  
From: agate!library.ucla.edu!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!  
gary@ames.arpa  
Subject: cheap packet?  
To: ham-digital@ucsd.edu

In article <CtLw87.Fpx@cs.dal.ca> aa568@cfn.cs.dal.ca (Ross Frederick Blakeney) writes:

>hello all, just wondering if there is anyway to use my modem as a TNC  
>if I have a program for the baymod or similar????

If your modem is a typical telephone Smartmodem, no. If your modem can be persuaded to behave as a Bell 103 dumb modem, it might be usable on HF. If it can be persuaded to be a Bell 202 dumb modem, it might be usable on VHF. But the Baycom program doesn't expect a Smartmodem, so you'd have to write your own software. And Smartmodems don't expect to be handed HDLC data, so you'd have to convince the modem's internal processor to get out of the way.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Fri, 29 Jul 1994 04:05:38 GMT

From: gatech!usenet.ins.cwru.edu!news.csuohio.edu!sww@uunet.uu.net

Subject: Emerg. Comm. Message Center

To: ham-digital@ucsd.edu

Hi Dave ...

When hurricane Hugo hit Puerto Rico, a city to my west was besieged with requests for traffic assistance. The club put up a MSYS BBS and began forwarding into me. I, in turn, got it to HF forwarders who got it to KP400 in Florida. (The Floridian traffic official made pre-hurricane plans as to where to deposit the health and welfare until it could be sent through. A INCREDIBLY smart idea which must have been too much for the traffic folks because it has not been done again.) The club also needed to keep track of a whole gambit of administrative functions like staffing, keeping track of resources, keeping everyone informed as to what was necessary, etc. The MSYS board came through meeting every need.

I and other NEOF boards discontinued bulletins and set our files for optimizing the Lorain, Ohio to HF forwarder paths.

I entered a bunch of messages myself and was VERY, VERY surprized at how many people got word via amateur radio and how many return phone calls were made based on the packet messages.

Lorain now has a Emergency Management Agency supported BBS.

Don't wait until the disaster hits. It's too late then. NO BBS system can be put together and made to run on a whim. They are too complicated. It has to be functional and in place before the disaster (or you better have one you can clone and set up). We were able to clone N08M, change the calls and port definitions and get it in place fairly quickly. However, we had the author and two beta sites local to us for assistance.

Sysops want to help. It took just a simple phone call to delete the bulletin routes in each BBS to optimize the traffic flow. Not too many sysops will pass up the opportunity to dump all the junk bulletins, just give them a reason!

HF sucks. It has been stuck in packet limbo for eight years due to a prohibition on experimenting with other than packet on other than certain frequencies by other than the annointed. That is the STA. Now that the STA will be going away, perhaps at least semi-automated forwarding will progress

into something other than a bunch of minor fixes to AMTOR. This leads me to stating the question about what you are going to do with your traffic? If you have 100 messages for Florida, how are you going to get them there? We were able to get a APLINK set up in Florida that we were able to move the traffic to. You better have some in service routes or you are going to have a heck of a time getting to your destination. Dumping Florida on VHF to the next BBS south of you does not constitute moving it.

73,  
Steve

N08M.#NEOH.OH.USA.NA

ag807@cleveland.freenet.edu < if you are going direct, use this

-----  
Date: 29 Jul 1994 13:30:12 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!cs.utexas.edu!news.tamu.edu!news.utdallas.edu!corpgate!bcarh8ac.bnr.ca!bcarh189.bnr.ca!bcarh8ab.bnr.ca!news@network.ucsd.edu  
Subject: EZPACKET  
To: ham-digital@ucsd.edu

In article 8t2@thecourier.cims.nyu.edu, jackson@longlast.cs.nyu.edu (Steven Jackson) writes:

>Hi all--

> Related to the previous request, I came across a simtel  
>repository directory that listed, with a wide array of packet  
>related programs, a TSR packet program.. I have been unable  
>to locate it (I think it's called pax) via archie and would  
>really like to see something like this.

>

>Any hints on whether it's still out?

>

You may want to try one of the simtel mirror sites such as oak.oakland.edu or wuarchive.wustl.edu . The simtel site itself was shutdown, but these sites are still kept up to date.

Alternatively, if you can find one of the simtel cdroms, you may be able to get it from there. I have one of these, and may be able to email you a copy if I can find it and you can't find it elsewhere. Send me a note and I'll see what I can do, but try the ftp sites first (or try archie).

regards,  
Dean.

---

Dean Denter -- VE7NCD

af580@freenet.carleton.ca (don't reply to stu9k21@bnr.ca it won't work)

-----  
BNR doesn't speak for me, and I don't speak for them.  
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Date: Fri, 29 Jul 1994 17:46:34 GMT  
From: newsfeed.pitt.edu!gvls1!ean@uunet.uu.net  
Subject: EZPACKET  
To: ham-digital@ucsd.edu

In article <31b094\$160@bcarh8ab.bnr.ca> af580@freenet.carleton.ca writes:

>  
>regards,  
>Dean.  
>---  
> Dean Denter -- VE7NCD  
>af580@freenet.carleton.ca (don't reply to stu9k21@bnr.ca it won't work)  
>-----  
> BNR doesn't speak for me, and I don't speak for them.  
>  
>

Thanks, Dean, for mentioning that I don't speak for you, but I are  
a singular person so perhaps you should say "I don't speak for him."

--  
Ed Naratil, W3BNR (All standard disclaimers apply)  
ean@VFL.Paramax.COM Amateur Packet: w3bnr@wb3joe.#epa.PA.USA  
ean@locke.ccil.org Snail: 531 Ringold St. Phoenixville, PA 19460

-----  
Date: Fri, 29 Jul 1994 10:15:51 GMT  
From: pipex!uknet!cix.compulink.co.uk!tmolloy@uunet.uu.net  
Subject: Internet<>Packet  
To: ham-digital@ucsd.edu

Are there any bridges between the Net and the Packet networks? It would  
be useful to be able to e-mail to/from people who only quote packet  
addresses.

TIA  
Tony

-----  
Date: 29 Jul 1994 19:54:42 GMT  
From: news.uiowa.edu!panda@uunet.uu.net

Subject: Internet<>Packet  
To: ham-digital@ucsd.edu

In note <Ctp5uF.Jr8@cix.compulink.co.uk>, tmolloy@cix.compulink.co.uk ("Tony Molloy") writes:

>Are there any bridges between the Net and the Packet networks? It would  
>be useful to be able to e-mail to/from people who only quote packet  
>addresses.

There's one I heard about (don't remember it's address though..) but you have to be a ham to use it.. US radio laws you know.. it's consider you transmitting on the thing if you wrote it...

>TIA  
>Tony

-----  
Date: Thu, 28 Jul 94 19:21:21 PDT  
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!gatech!newsxfer.itd.umich.edu!  
zip.eecs.umich.edu!panix!usenet@ames.arpa  
Subject: NYC Ham Freqs  
To: ham-digital@ucsd.edu

In article <30md5o\$8g7@thecourier.cims.nyu.edu>,  
<jackson@longlast.cs.nyu.edu> writes:

>  
> I was bored last night, so I took down every busy freq in  
> the 144MHz, 220MHz, and 440MHz ranges that I came across  
> that had some kind of packet going.  
>  
> 145.690, 223.440, 223.560, 223.620, 438.425, 441.025  
>  
> one of the two 440MHz links sounded very different. Is  
> that a 9600 baud link?  
>

While you didn't mention them, yes, there are several 70cm 9600 bps frequencies operating in the NYC area. There's a full duplex bit regenerating repeater on 448.775-. It's known as 450dux and is the basis of the Eastern Queens/ Western Nassau LAWN (local area wireless network). It also has a link East to Suffolk and beyond.

There's also a 9600 bps net/rom node on 441.600. However, it's actually about 2 to 4 khz low on xmit, and goes deaf for many random duration periods each day. It's operated by the EastNet folks who have been attempting to correct the problems for several years without success.

Hope this helps.

73,  
Bill  
kb2cq@panix.com  
kb2cq@kb2cq.ampr.org

-----  
Date: Fri, 29 Jul 1994 08:47:56 GMT  
From: agate!library.ucla.edu!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!  
gary@ames.arpa  
Subject: Time division multiplexing on high speed modems.  
To: ham-digital@ucsd.edu

In article <vaughnwt.8.0014F9E5@olympus.net> vaughnwt@olympus.net (Bill Vaughn) writes:

>Does anyone have any experience using TDM on a backbone ala T1 type system? I  
>don't even know if this is legal for hams. Any thoughts?

It's legal, but most of us don't have RF equipment with sufficient bandwidth to make it practical to split the channel this way. In most cases, we want all the bandwidth we can muster for our own use without splitting it.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Fri, 29 Jul 1994 17:54:33 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!cs.utexas.edu!utnut!nott!cunews!  
news@network.ucsd.edu  
Subject: Time division multiplexing on high speed modems.  
To: ham-digital@ucsd.edu

In article <1994Jul29.084756.9524@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>In article <vaughnwt.8.0014F9E5@olympus.net> vaughnwt@olympus.net (Bill Vaughn) writes:

>>Does anyone have any experience using TDM on a backbone ala T1 type system? I  
>>don't even know if this is legal for hams. Any thoughts?

>

>It's legal, but most of us don't have RF equipment with sufficient  
>bandwidth to make it practical to split the channel this way. In  
>most cases, we want all the bandwidth we can muster for our own

>use without splitting it.

>

I have heard that in New Zealand they have a national backbone of voice (digital) and packet based on 250 or 500 Kbps TDM.

im

--

Ian A. McEachern, VE3PFH	This space for rent.
Packet Working Group, Ottawa A.R.C.	
im@hydra.carleton.ca	
ian@ve3pfh.ampr.org	

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Date: 28 Jul 94 16:36:28 EDT

From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!gatech!dragon!indigo!hayes!bcoleman@network.ucsd.edu

To: ham-digital@ucsd.edu

References <rogjdCsoHKF.Iqp@netcom.com>, <gregCss119.7IF@netcom.com>,

<1994Jul19.143407.18075@ke4zv.atl.ga.us>ch

Subject : Re: GTOR--A big improvement?

In article <1994Jul19.143407.18075@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

> We need modem modulations that are more robust under HF conditons.

Agreed. (ah, but a classic chicken and egg problem, too)

> PSK is one direction, MSK too.

Hold the phone. PSK doesn't work well on HF with F2 propagation unless you are really close to the MUF. The reason is the multiple paths that signals can take cause all kinds of phase distortion of the signal. If the phase distortion becomes too great, it can render even FSK unusable.

(Ever wonder why 300 bps packet is mostly on 10 and 14 MHz, whereas RTTY and AMTOR run fine on 7 and 3.5 MHz, even 1.8? Multipath! At 300 bps, multipath overcomes the 300 baud symbol rate. At 110, 100 or 45 baud, multipath isn't so much of a problem. I've always thought that HF packet might get higher overall throughput on lower bands if we lowered the symbol rate to 150 or even 100 baud)

MSK is just FSK with the smallest possible modulation index. Helps to conserve bandwidth. Standard 200 Hz-shift 300 baud packet is pretty close to MSK. Going to a 150 Hz shift would do it. A net gain of 50 Hz. Big deal.



> Another tack is a multi-tone system like Piccolo.

Mutiple tones is the way to go for HF. You have to keep the symbol rate low and avoid phase modulation to avoid multipath phase distortion. You can't get too many states of amplitude modulation because the signal references change too much. It is nearly impossible to equalise a lot of the imperfections of the HF link since they change so rapidly. Your only choice is to use more tones.

--

Bill Coleman, AA4LR                               ! Internet: bcoleman@hayes.com  
Principal Software Engineer               ! AppleLink: D1958  
Hayes Microcomputer Products, Inc. ! CIS: 76067,2327  
POB 105203 Atlanta, GA 30348 USA   !  
Disclaimer: "My employer doesn't pay me to have opinions."  
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

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End of Ham-Digital Digest V94 #255

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